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Adolescent Mental Health Training for Middle School Educators

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Abstract

Background: Adolescent mental health disorders are an increasing concern in the United States. School systems, specifically educators, are in the unique role to aid in early identification of mental health disorders, as well to intervene in mental health distress. However, mental health training for educators is lacking, leaving educators unprepared to manage mental health concerns within their classroom.

Purpose: The purpose was to utilize an evidence-based training, the “Teacher Knowledge Update Guide” from TeenMentalHealth.org to train middle school educators on the signs and symptoms of mental health conditions in the adolescent population with the intent to increase awareness, knowledge, and confidence level within the educators.

Method: Within a Massachusetts K1-8th public school, an in-person training consisted of one two-hour session. The participants conducted pre- and post-survey and grade level group interviews to determine level of awareness, knowledge, and confidence level.

Results: Eighteen educators completed the training and surveys. Of the eighteen, twelve volunteered for group interviews. Results from the surveys indicated an increase in awareness, knowledge, and confidence amongst middle school educators regarding adolescent mental health as well as deeming the training beneficial. The group interviews indicated an increase in awareness and knowledge from the training but that participants lacked confidence to manage adolescent mental health disorders within their classrooms.

Conclusion: Training middle school educators on adolescent mental health can be a benefit to both adolescents and middle school educators when training is completed successfully within the school setting.

Keywords: Teachers/educators, mental health, education, training, adolescent

Adolescent Mental Health Training for Middle School Educators

Introduction

In the United States, there are a significant number of adolescent students diagnosed with mental health issues and concerns. Common diagnoses include Attention-Deficit-Hyperactivity Disorder (ADHD), anxiety, depression, and Post-Traumatic Stress Disorder (PTSD). Students with mental health issues have an increased risk for poor academic success, behavior problems, and for dropping out of school (Wei & Kutcher, 2014). Educators in the middle school population are not properly trained or prepared to identify signs and symptoms of a potential underlying mental health concern within their adolescent student population (Sisask et al., 2014). Due to the daily interactions with adolescent students, educators are in an ideal role to aid in early identification of mental health concerns and refer for timely and appropriate treatment.

Background

One in every four young people in the general population suffer from at least one psychiatric disorder (Sisask et al., 2014). According to the Centers of Disease Control and Prevention (CDC), ADHD, behavior problems, anxiety, and depression are the most commonly diagnosed mental disorders in children (Centers of Disease Control and Prevention, 2018). Statistics show that 9.4% of children (ages 2-17) have an ADHD diagnosis, 7.4% of children (ages 3-17) have behavior problem diagnosis, 7.1% of children (ages 3-17) have an anxiety diagnosis, and 3.2% of children (ages 3-17) have depression diagnoses (Centers of Disease Control and Prevention, 2018).

In addition, depression and anxiety diagnoses have been steadily increasing. In 2003, the number of children (ages 6-17) diagnosed with anxiety or depression was 5.4% (Centers of

Disease Control and Prevention, 2018). In 2007, the number jumped to 8% and from 2011-2012, the number reached 8.4% (Centers of Disease Control and Prevention, 2018). The National Association of School Nurse (NASN) reported anxiety, depression and thoughts of suicide were on the rise as of 2012 (Schwind et al., 2015).

In the 2015 Boston Public Health Commission report, approximately 27% of Boston public high school students reported persistent sadness. In addition, high percentages of persistent sadness were found in the neighborhoods of Dorchester, the community in which this DNP project is intended (Health of Boston, 2017).

Early diagnosis and appropriate services for children and their families can make a difference in the lives of children with mental health disorders. Diagnoses of depression and anxiety are more common with increased age (Centers of Disease Control and Prevention, 2018). There is a strong association between children's mental health and academic achievement. Students who consistently experience aggressive behaviors, depression, or high levels of anxiety have lower academic success (Frauenholtz et al., 2017). In addition, mental health disorders in the adolescent population that go untreated have significant negative outcomes such as poor school performance, family and friend difficulties, justice and legal system challenges, decreased life expectancy, and premature death by suicide (Wei & Kutcher, 2014). Adolescents with mental health disorders are six times more likely to drop out of high school than those without (Smith-Fromm & Evans-Agnew, 2017).

Schools reported an increase in the total number of students who suffered from mental illness. In addition, teachers have reported that it has become more difficult to receive appropriate support for such students. A majority of teachers lack the abilities to provide early intervention within the mental health realm (Glasper, 2017). Studies indicate that teachers and

other staff have limited knowledge in regard to mental health disorders. This acts as a barrier to care for children and their families dealing with mental health issues. Evidence has shown that children have identified teachers as support system members and those who would be potential players in support of mental health concerns (Glasper, 2017).

Teachers themselves have reported that they do not feel equipped to recognize children in mental health distress (Frauenholtz et al., 2017). Pre-service teaching training does not typically include mental health training. A review of state standards for professional teaching found that only one-fifth of teachers were able to identify and explain early mental health symptoms (Long et al., 2018). Teachers reported a lack of experience, training, and confidence to appropriately address mental health problems among their students (Long et al., 2018).

Early detection of students at risk is a crucial step in diagnoses - a role in which teachers can play an important part. Research indicates that teachers are willing to help, but lack confidence to engage with mental health disorders (Frauenholtz et al., 2017). According to the School Health Policies and Practice Study (SHPPS) in 2016, only 57.3% of districts had adopted a policy that stated schools would provide referrals for emotional or behavioral disorders (e.g., anxiety, depression or ADHD) (Centers of Disease Control and Prevention, 2016). Only 16.8% of districts required middle schools to have a specified ratio of counselors to students (Centers of Disease Control and Prevention, 2018). Sixty-four percent of districts provided funding for professional development or offered professional development to school health services staff or counseling, psychological, or social services staff on identification of emotional or behavioral disorders (anxiety, depression, ADHD) (Centers of Disease Control and Prevention, 2018). In addition, the percentage of districts provided funding for training or offered training to any teachers, administrators, and school staff other than the aforementioned for making appropriate

referrals to a school counselor, psychologist, or social worker was 69.9% (Centers for Disease Control and Prevention, 2016; Centers for Disease Control and Prevention, 2018). These statistics indicate a need for further training and support services.

Teachers and educators are in a unique position to identify youth at risk of mental health concerns. They can be a strong resource for early referral and treatment plans if the teachers/educators are trained appropriately (Wei & Kutcher, 2014). Trainings can be provided in a variety of forms and by different professionals, with the intent of providing education surrounding mental health concerns (Aakre et al., 2016; American Academy of Social Work & Social Welfare, 2016; Frauenhotlz et al., 2017).

Problem Statement

Adolescent-aged students within a school setting are at high risk for mental health problems. Educator training often lacks direct instruction to assess, recognize, and to intervene in adolescence mental health issues that arise. This results in compounding risk for untreated mental health diagnoses, unsafe and challenging behaviors within the classroom, and increased risk for poor academic success. Targeting middle school educators directly through adolescent mental health training can aid in closing this gap in knowledge and care.

Organizational “Gap” Analysis of Project Site

An organizational gap analysis was conducted in a Middle School (6th-8th grade) located in Dorchester, MA. The gap analysis included a 10-question, anonymous survey of 26 educators who volunteered to participate. The site chosen had a full-time school psychologist and social worker with high mental health referral rate from educators. The results of the gap analysis indicated that comfort level among participating educators with student mental health concerns increased with personal ability to recognize a potential concern, having personal mental health

experiences, length of professional teaching, and student relationships. Comfort level among participating educators decreased with having to address the concerns. Sixty-eight percent of participating educators reported “somewhat or not comfortable” with adolescent mental health concerns. Ninety-two percent of participating educators stated they did not receive training to intervene and assist with students experiencing acute anxiety. Ninety-two percent also stated they did not receive training to intervene and assist with students experiencing depression. One participating educator stated “yes”, and one stated “N/A” to receiving training. Ninety-six-percent of participating educators stated “yes” to feeling that they could benefit from professional development/training regarding mental health issues. Participating educators requested yearly training on mental health issues, more social work staff, and classroom observations for increasing awareness and comfort.

Review of the Literature

Rating of Evidence

The evidence for the review of literature was graded utilizing the John Hopkins Nursing Evidence-Based Practice tool. The majority of the literature reviewed was graded Level II with a B quality rating. Three studies were graded Level I quality B. Four were policies and statistical reports that received Level III grading and C quality, however, they were used in the review as the information provided factual evidence of a current problem.

Overall, it was noted that there are few randomized control trials available regarding mental health training in schools. Two studies included in the review did not have results currently published, available to the public, or the results were unable to be located during the review. Therefore, it can be determined that through the review of literature, there was a lack of randomized control trials and Level I graded evidence. This can be considered justifiable due to

withholding educational interventions to yield a comparison control could be problematic for students and educators.

Search Method

A review of literature was conducted to gain insight and knowledge into adolescent mental health disorders, mental health first aid in schools, and educator training to manage adolescent mental health disorders in the hopes to understand how to effectively develop an educator training program in the school setting. The review included search terms “*teachers/educators, mental health, education, training, adolescent*”. CINAHL and PubMed databases were used and resulted in 2609 results. Fourteen results were utilized as they fit the inclusion criteria of full text, English language, and publication date within the past 5 years (2014-2019). Articles translated into the English language were not included.

Statistics and Mental Health Training

Mental health statistics. According to the Centers for Disease Control and Prevention (2018), ADHD, anxiety, and depression are the most common mental disorder diagnoses in children. Depression and anxiety rates have been increasing over time. As children age, depression and anxiety become more common (Centers of Disease Control and Prevention, 2018). According to Long et al. (2018), the 2001-2004 National Health and Nutrition Examination Survey concluded that 13.4% of adolescents ages 12-15 were diagnosed with one of six DSM-IV mental disorders.

Health Boston (2017) reported data regarding students in Boston, Ma. The students were asked if during the past 12 months did they feel “sad or hopeless” every day for 2 weeks or more in 2015. The results indicated that 27% of Boston public high school students reported persistent sadness. From 2013-2015, there was a combined total of 28% of students in Boston public high schools that reported persistent sadness. In addition, the rate of mental health hospitalizations in

2015 in Boston was 77.1/10,000 residents. Congruently, the suicide rate was 6.0 deaths/100,000 residents in Boston in 2015 (Health Boston, 2017).

Salerno (2016) reports that the adolescent years are the most favorable to intervene with mental illness due to the onset of many disorders before the age of 20. In addition, Frauenholtz et al. (2017), report that school employees play an important role in supporting and understanding mental health distress, making schools a good setting to implement early identification and treatment of mental health issues to target adolescent mental illness.

Mental health training gap in schools. According to Glasper (2017), schools in Great Britain have been increasingly reporting that a number of students are suffering from mental health issues. Congruently, educators have determined that it is difficult to find students appropriate support. The National Association of Schoolmasters and Union of Women Teachers in Great Britain, reported data from a survey conducted by 2,000 teachers. The results indicated that 98% of teachers have interacted with students that they believe were in mental health distress. Ninety-one percent of teachers were aware of students suffering from panic and anxiety attacks. The report also indicated that 64% of teachers had been exposed to self-harm from their students, 49% had students with eating disorders, and 47% had witnessed student's express obsessive-compulsive disorders. In addition, the survey concluded that 89% of the teachers who were surveyed believed that mental issues caused poor concentration amongst their students. The survey results emphasized that along with mental health disorders being prevalent in the schools, teachers lacked confidence and training to aid in mental health concerns. Twenty-four percent of teachers stated that they were confident that they would receive support with mental health disorders from mental health services and 46% indicated that they had never received any training in mental health disorders amongst children (Glasper, 2017).

Additionally, according to Wei & Kutcher (2014), untreated mental health disorders in youth can have considerable negative outcome such as poor school performance, family and peer difficulties, welfare burden, decreased life expectancy and increased early death related to suicide. Due to the close proximity of children, schools are crucial locations that can aid in identification of youth mental disorders. However, identification of mental health concerns can only be successful if educators are appropriately trained (Wei & Kutcher, 2014).

Frauenholtz et al. (2017) agreed stating that current estimates reveal that approximately 13% of children from ages eight to 15 have had a mental health disorder in the previous year. In addition to this statistic, there is a lack of knowledge and mental health literacy related to children's mental health. The lack of knowledge acts as a barrier to assisting children and their families dealing with mental health concerns. Frauenholtz et al. (2017) report children have identified teachers as key support system members and as possible sources for mental health outlets. In addition, they suggest that literature has supported that teachers possess limited knowledge and self-efficacy surrounding ability to intervene with mental health challenges (Frauenholtz et al., 2017).

Comparably, Smith-Fromm and Evans-Agnew (2017) report that more than half of teachers experience students with mental health issues. However, only half of teachers feel prepared to identify and respond. In a case study by Smith-Fromm and Evans-Agnew (2017) of educators, para-educators, and coaches in two high schools in the Pacific Northwest, it was determined that more than 60% of educators felt that their knowledge on mental health disorders was insufficient in their ability to recognize mental health illness in their students. The case study data indicates that educator understanding of mental health disorders in adolescents could be

improved with more training in identification and response to student mental health concerns (Smith-Fromm & Evans-Agnew, 2017).

According to Long et al. (2018), teachers do not receive adequate training for mental health problems and therefore, do not feel prepared to handle mental health problems within their classrooms. Long et al. (2018) also reported that a review of state standards regarding professional teaching education determined that only one-fifth of programs required teachers to identify early mental health signs. Without this additional training, teachers are not able aid in early identification (Long et al., 2018).

Sisask et al. (2014) equally agree with the need for early identification. Sisask et al. (2014) report that mental health problems tend to add to classroom burden and unfortunately are only identified when the burden becomes a barrier to effective teaching. In addition, teachers have acknowledged that they are key players in the early identification of mental health conditions but lack confidence to address the issues with their students and their families (Sisask et al., 2014).

According to the American Academy of Social Work and Social Welfare (2016), the policy recommendations for ensuring healthy development for all youth include preventing behavioral health problems and mental illness. One specific recommendation of the policy states training and enabling a workforce for effective prevention practices. This recommendation includes social workers, nurses, teachers, psychologists, physician and others to deliver mental health prevention programs to the youth. To ensure an effective prevention program, training team members, such as teachers, is a crucial piece in ensuring healthy development of the youth (American Academy of Social Work and Social Welfare, 2016).

Pereira et al. (2014) report despite increased reports of need for educator training and increased efforts for training, there are barriers to educator training such as sustaining them over time, cost of hiring the trained personnel, lack of access to the training, need for periodic refresher courses, and continuous collaboration with trained professionals.

Qualitative mental health literacy. To understand teacher perspectives of mental health literacy amongst school educators, Fraunholtz et al. (2017) conducted qualitative focus groups amongst school staff and community mental health professionals. The focus groups consisted of 52 members from three school groups and four community mental health centers. The results indicated that school educators reported limited mental health knowledge which encumbered their ability to aid in mental health distress amongst their students. In addition, community health members reported that lack of mental health knowledge amongst teachers impeded the ability for interventions for students of concern. Areas in which the focus group determined were lacking in children mental health knowledge amongst school staff included symptoms of mental health distress in children, how to intervene with children experiencing mental health distress, psychotropic medication, stigma, and mental health services. The study determined that staff often have limited knowledge to address this need. In addition, formal and informal training opportunities to school staff should be provided in a variety of ways (Fraunholtz et al., 2017).

Evidence Based Solutions

In order to combat the gap in educator knowledge surrounding mental health awareness and understanding, programs have been developed to integrate mental health training to teachers in schools.

Mental health first aid-England. The Mental Health First Aid-England program was part of a government strategy to alter mental health support for children and adolescents

(Glasper, 2017). The training goal was to increase educator ability to respond to and manage mental health problems that present in children such as depression, anxiety, suicidal thoughts, self-harm, eating disorders, and psychosis. The program, initially developed by Kitchener and Jorm in 2008, aimed to give teachers practical advice to respond to early signs of mental health changes in children. Currently, there is no data on the results of the training as it was implemented in June of 2017 (Glasper, 2017).

‘Go-To’ educator training. Similarly, Wei and Stan (2014), implemented the program ‘Go-To’ Educator training in a secondary school setting. The program, developed in 2009 by a team composed of educators and mental health professionals, is based on the fundamentals that teachers with strong relationships with students would most likely be the individual’s students go to for mental health concerns.

Wei and Stan (2014) piloted the training amongst 134 participants from 40 schools in 2012. The participants were to complete a pre-and post-survey to determine effectiveness of the training on educators. The results indicated that the ‘Go-To’ Educator Training significantly improved educator’s knowledge about adolescents with mental disorders such as identification and when to refer for additional services. In addition, the pilot resulted in increased positive attitudes towards mental health disorders, which was significant as the baseline attitude was positive prior to the training, yet the attitudes still increased (Wei & Stan, 2014).

Wei and Stan (2014) concluded that the evidence indicates the effectiveness of mental health interventions by educators once properly trained. The evidence suggests that a training approach to mental health for educators is plausible and useful in addressing mental health needs in school settings. However, limitations include potential bias from the sample and lack of randomized control trial (Wei & Stan, 2014).

On-line role play stimulation. Long et al. (2018), conducted a randomized control trial of 18,896 elementary school teachers to determine the effectiveness of online role-play stimulation in training for early identification of mental health concerns. The results concluded that online role-play stimulation is an effective means to increasing educator behaviors and attitudes towards addressing mental issues in schools. In addition, it was concluded that online training methods have the potential to be a sustainable and cost-effective means to training educators. Ultimately, the study concluded the implications for school health include teacher training in comprehensive mental health planning (Long et al., 2018).

Educational videos. Pereira et al. (2014) conducted a randomized control trial of a web-based educational program regarding mental health for educators. The program consisted of a website that had six educational videos that included collaboration with teachers, child psychiatrists, and parents of students with mental health disorders. Four other videos in the program include addressing clinical issues such as depression, anxiety, ADHD, and social interaction/behavior problems. Fifty-two teachers completed the program and the results indicated that the teachers who completed the training showed greater gains in knowledge than those who did not have the training and those who did a video-based program. In addition, the study concluded that having support from school administration and policy makers allowed for more active participation and knowledge gain (Pereira et al., 2014).

Saving and empowering young lives Europe. Sisask et al. (2014) conducted a cross-sectional study as part of the Saving and Empowering Young Lives in Europe (SEYLE) program. The study focused on a sample of schools representing 11 European countries randomly chosen which was comprised of 2,485 teachers. The study intent was to address teacher belief in aiding students with mental health concerns. The study concluded that teacher

confidence in becoming involved with student mental health increases school climate, psychological well-being of students and staff and ability to understand student mental health issues (Sisask et al., 2014).

Youth mental health first aid-USA. Additionally, Aakre et al. (2016) conducted a study regarding the use of Youth Mental Health First Aid-USA amongst social services employees in Maryland. The intent of the study was to determine the effectiveness of the Youth Mental Health First Aid-USA program; a program that trains the general public on common emotional issues and psychological disorders amongst adolescents. The training provides the trainees tools to assist those in emotional distress. It is a modified version of Mental Health First Aid, which was adapted for use in the United States in 2008. The study, with 384 individuals, concluded that individuals who completed the Youth Mental Health First Aid-USA training were stronger in identifying risk of suicide, encouraging appropriate professional aid and self-help strategies, and using active listening techniques. This study lacked a control group and therefore, the data of improvement cannot be responded to real-world change. However, the increase in learning can indicate the usefulness of training for mental health conditions amongst the general population (Aakre et al., 2016).

Similar to Aakre et al. (2016), Schwind et al. (2015), reported the use of Youth Mental Health First Aid-USA as a training course for an Austin region school district. Topics that were focused on with this program included suicidal ideation, ADHD, panic attacks, aggression, and eating disorders. The course was an interactive eight-hour course. A barrier to this program was cost of the training which delayed the training as the school district struggled to afford the program. In 2015, the training was undergoing with the goal to train 650 school staff. Currently, there is no data found on the outcome of the training (Schwind et al., 2015).

Systematic Reviews

Salerno (2016) conducted a systematic review of school based mental health interventions that focused on the effectiveness of mental health interventions in K-12 school settings. The systematic review of 3,186 articles, narrowed to 15, all indicated measurable improvements with mental health educator training. Overall, the improvements noted through the studies included attitudes towards mental health, mental health knowledge, and an identifying help-seeking amongst adolescents. The results of the systematic review indicate that mental health awareness and training programs have the ability to positively correlate to mental health care awareness and education. Salerno (2016) indicated that further evidence is needed regarding mental health training but that the review suggests that the mental health awareness and training programs in schools are effective.

Evidence Based Practice: Verification of Chosen Option

Based on the review of literature, it is evident that mental health training for educators is a well-supported practice. The "Go-To Educator Training", developed in Canada in 2009 by Dr. Kutcher, aimed to introduce mental health training to educators. The guide aids in creating an atmosphere for early detection and recognition of mental health disorders. This program has shown to significantly improve educator knowledge on mental health disorders as well as create an environment that decreases the stigma of mental health illness.

The website, TeenMentalHealth.org, offers free guidelines for mental health education for teachers through the "Teacher Knowledge Update" guide (Baxter et al., 2017). Utilizing the results from the gap analysis specific to the school and the "Teacher Knowledge Update" guideline, educators in a middle school setting can be trained appropriately in adolescent mental health concerns.

Theoretical Framework/Evidence Based Practice Model

Kurt Lewin's Change Theory is a fundamental approach to managing change (Schein, 1999). The intent of mental health training for middle school educators is to change the methods in which mental health concerns are managed in the school setting. Lewin's Change Theory reports change in three steps: unfreezing, changing, and freezing. Lewin's model focuses on behavior modification of people through the three steps. During the unfreezing stage, people have feelings regarding the expected change. Some feelings include impatience, denial, doubt, anxiety, etc. During the unfreezing phase, people need to be clearly addressed on the importance of the change so that they are more willing to accept the change (Schein, 1999).

For this DNP Project, the unfreezing phase is presenting data to administration and middle school educators on the number of mental health referrals per month in the middle school setting, local and national statistics, and the expected outcomes of the training. The unfreezing phase also included sharing the gap analysis data with staff indicating a need for change within the middle school setting.

During the change stage, the act of the change occurs. Lewin recommends implementing the change in a short period of time as to prevent relapsing into habits and rituals prior to the change (Schein, 1999). For this project, the change phase was the mental health training that occurred for educators. The time frame for the intended training was within a one session training. The last phase, the re-freezing phase is focusing on solidifying the change (Schein, 1999). In order to maintain the training provided, resources were sent to staff to refresh when needed. Grade level group interviews were also held at the end of the training to determine how to sustain the training going forward.

Methods

Goals, Objectives and Expected Outcomes

Goals. The goals of this DNP Project were to increase awareness, knowledge, and confidence amongst middle school educators regarding adolescent mental health disorders through an in-person training session followed by completion of pre-and post-surveys to assess increase in awareness, knowledge and confidence level.

Objectives. The Project Team created a unique mental health training program for middle school educators through gap analysis data and evidence-based practice to utilize for the trainings. Through these trainings, the objectives were that:

1. The participants would verbally recall three signs of a mental health disorder in group discussions by the completion of the training session.
2. The participants would verbally demonstrate understanding of mental health disorders through case study discussion by the completion of the training session.
3. The participants would verbally explain the importance of early recognition of adolescent mental health disorders through group discussion by the completion of the training session.
4. The participants would identify confidence level with adolescent mental health disorders via documentation on the survey by completion of the training session.

Expected outcomes. Based on the gap analysis, it was determined that 32% of educators felt “comfortable or very comfortable” with adolescent mental health concerns and 68% of educators felt “somewhat or not comfortable”. Furthermore, 96.1% of middle school educators stated “yes” to feeling that they could benefit from professional development/training regarding adolescent mental health issues. Based on this benchmark data, the expected outcome for the two-month

mental health training was an increase in awareness, knowledge, and confidence level by at least 50% of middle school educators as measured by survey data and supported by qualitative group interview analysis.

The goal for 50% increase in awareness, knowledge, and confidence level as an attainable and realistic goal was calculated by summing half of the participants that reported baseline comfort with adolescent mental health and those who did not. This goal was calculated via the Likert scale pre- and post-survey. In order to reach this goal, the implementation occurred through one mental health training program.

Project Design

This project used a one-group, pre-test and post-test design. A mental health training program was created using feedback from the gap analysis in addition to the “Teacher Knowledge Update” guide from Baxter et al. (2017). For this DNP Project the Project Team consisted of the project leader (DNP student), school social worker and school psychologist.

The training program consisted of one two-hour, in-person training session utilizing PowerPoint presentation and interactive case studies (Appendix A). The training included scenarios on how to identify particular mental health concerns, focusing mainly on mental disorder overviews, defining mental health, depression, suicide/self-harm, anxiety disorders, ADHD, and PTSD. Through this presentation, educators were expected to gain confidence, understanding, and awareness of adolescent mental health signs and symptoms (Baxter et al., 2017).

To measure confidence, understanding, and awareness, paper-based pre- and post-test surveys (Appendix B) were conducted. After the conclusion of the training session, volunteer

based group interviews divided by grade-level teams were held to determine successes and next steps for further implementation of the training.

Cost-Benefit Analysis/Budget

Planning for the training included an analysis of financial costs and time that was planned to be sustained. The overall cost of the project was minimal, and the DNP student contributed all funding for this training program. Cost-Benefit Analysis/Budget Table can be found in Appendix D.

Project Site and Population

The project site was a K1-8th grade school in Massachusetts. The subgroup that the project focused on was the 6th-8th grade educators. Within the school (2018-2019 school year), there were 219 middle school students, 26 middle school educators, five middle school administrators, two middle school staff, one social worker, one school psychologist, and one school nurse. The school administrators fully supported this project.

The educators in the school ranged from new, first year educators to professional status (minimum of five years of teaching). There were 11 male educators and 15 female educators. Due to staff turnover and retention issues, only 18 educators participated in the training. Of the 18 educators, 14 were female and four were male. Educators were expected, as instructed by administration and via their school contract, to attend Professional Development throughout the year. The mental health training for the quality improvement project was part of the mandated professional development that educators were required to attend.

The students within this school were ages 11-14. The composition of students included 114 students who were African American, 95 students were Hispanic, and five were classified as “other” and two students were White. There were 117 female students and 102 male students.

Within the site, there was a current protocol for mental health referrals. This consisted of educators referring mental health concerns via a secure electronic form to the social worker and school psychologist. Once the form was submitted, the social worker and school psychologist worked collaboratively to determine next steps based on the details in the referral.

Stakeholders for this site included the school network, board, school administration, and school mental health team (social worker and school psychologist). Administration aided in scheduling training time and location as the project developed, along with ensuring educator participation. The school mental health team worked collaboratively to assess that the training met the educator and the student's needs prior to implementation.

Implementation

Utilizing the review of literature, the "Teacher Knowledge Guide" was determined to be best fit for the training needs of the middle school educator sample (Baxter et al., 2017). A Project Team was created which included the school social worker, school psychologist, and school nurse (DNP student) to determine the specific modules that go with the "Teacher Knowledge Guide". Four meetings, one hour in length, occurred with the Project Team to develop seven modules.

These modules (Appendix A) were based on the feedback from the gap analysis, current trends in the school's mental health referrals, and national statistics. Following the creation of the modules on PowerPoint, a meeting between the Project Leader (DNP student) and administration occurred to determine dates and times that the training could occur in the upcoming fall months.

Training. Implementation of the adolescent mental health training occurred on Tuesday, November 5th, 2019. Eighteen participants were present for the entirety of the training. Participants were explained that the training was part of a DNP project for the University of

Massachusetts Amherst. Participants were reminded that their attendance and participation was completely voluntary and that they were able to leave the training at any point, with no repercussions.

Prior to starting the training, participants were asked to complete the pre-training survey. The surveys were handed out by the capstone project mentor. The surveys were numbered and handed out after being shuffled, therefore, the participants could not be identified by the number on the survey. Participants were reminded that their responses were completely confidential and that they would be identified by the numbers on the surveys. Participants were then asked to not write their names or any identifying information on the surveys. Following the five minutes dedicated to pre-training survey completion, the two-hour PowerPoint presentation commenced.

Participants were given the opportunity to ask clarifying questions following each topic discussed and were allotted 10 minutes to discuss amongst their peers regarding the topic presented. At the one-hour mark, participants were given a 10-minute break. Following the break, the rest of the PowerPoint training was conducted, ending with two case studies. For the case studies, participants separated into four groups to discuss the cases and provide solutions. Each group then shared with all training participants their ideas, solutions, and questions for each case study. The case studies were then reviewed and discussed with the school's mental health team.

Upon the conclusion of the training, participants spent 10 minutes asking questions regarding the training. Participants were then asked to complete the post-training survey and submit finished surveys to the DNP Student or capstone mentor who reviewed the surveys for completion. Lastly, participants were instructed that volunteer-based group interviews would occur in the following weeks and, if they were interested, they could sign up for a time slot.

Group Interviews. Group interviews were divided into grade level teams, which included 6th, 7th, 8th, Encore (Physical Education and Theater educators). The group interviews were conducted in a private space and each interview lasted from one to one and a half hours. Prior to the start of the group interviews, participants were informed that, with permission, their responses would be transcribed. All participants agreed. Secondly, participants were informed that all information would be kept confidential and would be not labeled by name. Participants were reminded that the interview was on a volunteer basis and they could leave the interview at any point.

Group interview questions are located in Appendix C. All participants remained present for the entirety of the group interview. During the interviews, the DNP student led the interview, while taking time to scribe the responses to the questions.

Measurement Instruments

To measure the outcomes of this DNP Project, the following instruments were created by DNP student and project mentor: pre- and post-surveys, and grade-level group interview question template based on the topics presented in the “Teacher Knowledge Update” guide. The pre- and post- survey questions were formulated focusing on knowledge, confidence, and awareness of the following discussion points: mental disorder definition, mental health definition, depression, suicide and self-harm, anxiety, post-traumatic stress disorder, and attention deficit hyperactivity disorder. In total, the surveys consisted of 17 questions in a Likert style format measuring from “strongly agree to strongly disagree” (Appendix B). The group interview questions were created to discuss broad experiences from the training. The questions focused on overall perception of the training, thoughts on the topics presented, strengths and weaknesses of the training, confidence, knowledge and awareness of the disorders following the

presentation, and plans for future implementation. These questions were created with the project mentor and the school based mental health team (Appendix C). The surveys were paper format and were pre-labeled with a number. Each participant received both the pre- and post-survey at the beginning of the training. The numbers were used to identify each participant and aid in matching the responses for data analysis while protecting confidentiality.

Data Collection and Analysis Procedures

Pre-training. Immediately prior to the training, the pre-survey was disseminated to all participants of the training. Educators were given 10 minutes to complete the survey prior to the training (Appendix B).

Post-training. Immediately following the training session, participants were asked to complete the post-survey with the same questions as the pre-survey (Appendix B). Data collection for the surveys consisted of the DNP Student reviewing the responses to each question for each participant. To do this, the DNP Student recorded the number of participants that selected “Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree” for each question for both pre-and post-survey. This was done by hand as the surveys were on paper. Once the data were tallied, the percentages of participants selecting a particular answer was conducted for each question.

Interviews. Two weeks following the completion of the trainings, group interviews with educators were conducted to gather data on: overall opinion of the training, confidence level with adolescent mental health disorders, ability to recognize signs and symptoms of mental health disorders, use of the training lessons in the classroom setting, how grade level teams are dealing with adolescent mental health disorders, feedback for improvement of the training, and other thoughts on the training. Data collection for the group interviews were completed via scribing

the responses from the participants. Once the data was collected from each group interview, the responses were then typed into a document for each question that was discussed by the participants. Additional questions/comments that were discussed in each group interview were also added to the document.

Human Subjects Protection

The University of Massachusetts Amherst institutional review board reviewed the project and determined it was not research. Although staff were mandated to attend Professional Development per their contract, there were no repercussions for absences for this training. All staff who attended the training were fully informed about the project prior to implementing the training modules. Evaluations were created to secure anonymity of all participants. All information that was collected as part of evaluating the impact of this project was aggregated data from the project participants and did not include any potential identifiers. The findings from this quality improvement project are intended to be used only at the project site and are not meant to be generalizable.

The Project Team includes a licensed social worker and school psychologist, who agreed to be readily available for any personal concerns or questions regarding any potential sensitivity to the training modules. The data surveys were pre-numbered with randomly-generated identification numbers and given to each participant prior to the training. Each educator received the same numbered pre-training survey and post-training survey at the time of the training.

Results

Implementation of the adolescent mental health training within a K1-8th grade school In Massachusetts occurred on Tuesday, November 5th, 2019. Eighteen participants were present for

the entirety of the training. The results are summarized below in tables that represent each question on the pre- and post- surveys (Appendix B):

Table. Percent Change on Survey Questions

Question	Response	Respondents Pre-test (n)	Respondents Post-test (n)	Percent Change (%)
1. I feel confident in my ability to define and explain what a mental disorder is.	Strongly Agree	2	9	78
	Agree	6	9	33
	Neutral	5	0	NA
	Disagree	4	0	NA
	Strongly Disagree	1	0	NA
2. I feel confident in my ability to define and explain what mental health is.	Strongly Agree	2	9	78
	Agree	9	8	-13
	Neutral	4	1	-300
	Disagree	3	0	NA
	Strongly Disagree	0	0	NA
3. I feel confident in my ability to define and explain what depression is.	Strongly Agree	2	9	78
	Agree	12	9	-33
	Neutral	3	0	NA
	Disagree	1	0	NA
	Strongly Disagree	0	0	NA
4. I feel confident in my ability to recognize the signs and symptoms of depression in adolescents.	Strongly Agree	2	8	75
	Agree	10	7	-42
	Neutral	3	2	-50
	Disagree	3	1	-200
	Strongly Disagree	0	0	NA
5. I feel confident in my ability to refer a student with signs of depression to the mental health team.	Strongly Agree	2	9	78
	Agree	11	7	-57
	Neutral	2	2	0
	Disagree	2	0	NA
	Strongly Disagree	1	0	NA
6. I feel confident in my ability to define and explain what suicide and self-harm is.	Strongly Agree	4	10	60
	Agree	13	7	-85
	Neutral	1	1	0
	Disagree	0	0	NA
	Strongly Disagree	0	0	NA

7. I feel confident in my ability to recognize the signs and symptoms of suicide and self-harm in adolescents	Strongly Agree	2	9	78
	Agree	8	8	0
	Neutral	3	1	-200
	Disagree	5	0	NA
	Strongly Disagree	0	0	NA
8. I feel confident in my ability to refer a student with signs of suicide or self-harm to the mental health team.	Strongly Agree	3	9	67
	Agree	9	9	0
	Neutral	3	0	NA
	Disagree	3	0	NA
	Strongly Disagree	0	0	NA
9. I feel confident in my ability to define and explain what anxiety disorders are.	Strongly Agree	6	5	-20
	Agree	3	9	67
	Neutral	5	3	-67
	Disagree	4	1	-300
	Strongly Disagree	0	0	NA
10. I feel confident in my ability to recognize the signs and symptoms of anxiety disorders in adolescents.	Strongly Agree	4	7	43
	Agree	6	7	14
	Neutral	4	1	-300
	Disagree	3	2	-50
	Strongly Disagree	1	0	NA
11. I feel confident in my ability to refer a student with signs of anxiety disorders to the mental health team.	Strongly Agree	5	8	38
	Agree	6	7	14
	Neutral	3	2	-50
	Disagree	3	1	-67
	Strongly Disagree	1	0	NA
12. I feel confident in my ability to define and explain what Post-Traumatic Stress Disorder is.	Strongly Agree	4	8	50
	Agree	5	7	29
	Neutral	2	3	33
	Disagree	6	0	NA
	Strongly Disagree	1	0	NA

13. I feel confident in my ability to recognize the signs and symptoms of Post-Traumatic Stress Disorder in adolescents.	Strongly Agree	3	8	63
	Agree	4	7	43
	Neutral	5	1	-400
	Disagree	6	2	-200
	Strongly Disagree	0	0	NA
14. I feel confident in my ability to refer a student with signs of Post-Traumatic Stress Disorder to the mental health team.	Strongly Agree	4	9	56
	Agree	6	7	14
	Neutral	4	1	-300
	Disagree	3	1	-200
	Strongly Disagree	1	0	NA
15. I feel confident in my ability to define and explain what Attention Deficit Hyperactivity Disorder is.	Strongly Agree	1	8	88
	Agree	9	8	-13
	Neutral	4	1	-300
	Disagree	4	1	-300
	Strongly Disagree	0	0	NA
16. I feel confident in my ability to recognize the signs and symptoms of Attention Deficit Hyperactivity disorder in adolescents.	Strongly Agree	2	9	78
	Agree	8	8	0
	Neutral	4	1	-300
	Disagree	3	0	NA
	Strongly Disagree	1	0	NA
17. I feel confident in my ability to refer a student with signs of Attention Deficit Hyperactivity Disorder to the mental health team.	Strongly Agree	1	8	88
	Agree	6	8	25
	Neutral	2	1	-50
	Disagree	8	1	-700
	Strongly Disagree	1	0	NA

Survey Results

As demonstrated in the table, the survey data showed an increase in awareness, knowledge, and confidence amongst middle school educators regarding adolescent mental health. A significant increase in “strongly agree” percentage for all questions, with the exception of anxiety disorder related confidence, where “agree” was significantly increased, was indicated on the survey results. In addition, the post-survey results indicated no “strongly disagreed” in any of the questions, compared to those of the pre-survey results. The survey results indicated an

overall increase in awareness, knowledge, and confidence of the participating educators following the mental health training.

Group Interviews Results

Group interviews were conducted between November 11th, 2019 and November 23rd, 2019. Four group interviews (sixth grade, seventh grade, 8th grade, and Encore [Physical Education and Theater]) were completed consisting of a total of twelve volunteered participants.

Can you share your overall thoughts on the training?

Participants indicated that overall the training was beneficial, especially for those educators who were in year one or two of teaching. Some participants shared that prior to the training they believed they had a moderate understanding of adolescent mental health but were surprised to learn how much information they had not known. Two participants indicated that they were familiar with most of the information that was shared yet found the training to be beneficial in regards to their approach to students and their families. A commonality that was discussed that was mentioned in all of the group interviews was that the training could have been longer than two hours with more explanation of disorders, how to manage mental health in the classroom, and more case studies. Lastly, all participants of the group interviews reported that the training was their first formal mental health training for adolescents and that their baseline knowledge stemmed from personal experience or their own independent readings.

What were your thoughts on the topics presented?

Participants found suicide and suicide ideation to be the most impactful with many reporting that every day in their classroom's students make statements regarding "dying or wanting to kill themselves". In addition, participants reported that they do not feel equipped to manage these statements or how to support the students in the classroom. Another topic that was

discussed frequently amongst the participants was ADHD. The participants reported that the ADHD topic was “eye-opening” and helped them to create targeted plans on how to tailor their teaching and classroom management style to all students, even those without an ADHD diagnosis. Participants indicated that more information was needed on how to discuss diagnoses with families and the right language to use with students when a student has a known diagnosis. In addition, how to manage difficult behaviors and behavior management was a topic that many participants indicated would have been beneficial to include in the training.

What do you think was the best part of the training?

Participants agreed that the best part of the training was receiving training and education in an area that is so prevalent in their work but underrecognized. Another common topic included the recognition amongst participants of focusing on personal experiences, self-diagnoses, and/or family experiences to relate to the students when in actuality each diagnosis is different. Some participants indicated that learning the legal aspects of diagnosing and the criteria for mental health diagnoses was important as it reminded them to not label students. Three participants indicated that the best part of the training was the “shock” of not knowing as much as they anticipated. One participant shared that they had circled agree/strongly agree with knowledge, confidence, and understanding of specific illnesses on the pre-test only to change to disagree/strongly disagree in the post-test because they realized how much information they still did not know. Lastly, participants agreed that the visual aspect of the PowerPoint training as well as handouts was appreciated as it allowed participants to have the materials to review independently.

How do you think the training could be improved?

Participants unanimously agreed that the training should be longer than two hours with more in-depth discussion. Participants suggested short case studies for each mental health diagnosis instead of a select few. In addition, spending more time with the case studies and group discussions as participants felt it was important for educators to have these difficult conversations and plan as team for how to manage mental health disorders within the classroom. One participant suggested that the amount of material in a two-hour block was “overwhelming” and recommended that the information be segmented into a weekly training with time to discuss each topic in more depth, while not feeling “like information overload”. Lastly, one participant suggested that a parent perspective would be an interesting addition to the training to understand how parents view their adolescent’s mental health, how teachers can best support, and how to work collaboratively with parents.

Do you feel that you are more aware of adolescent mental health disorders?

A majority of the participants indicated that the training increased their awareness of adolescent mental health disorders. Some participants indicated that the training encouraged them to become more aware of their students’ needs regarding mental health, how to make more of an effort to understand their diagnoses, and how to ensure they are most successful in school. Two participants indicated that they felt that they were “aware of adolescent mental health needs before this training” and therefore did “not feel more aware after the training”. However, both participants indicated that the training did encourage them to become more aware of how mental health impacts their day to day life including friendships and relationships. Many participants noted they could think of a student of whom they were now more aware because of the training.

Do you feel that you have increased knowledge of adolescent mental health disorders?

All participants agreed that they had an increased knowledge of adolescent mental health disorders following the training. One participant stated “I’ve taught for many years and have worked with many students who display a lot of things you shared. I always learn something new”. Other participants echoed that statement reporting that they were appreciative of having new information on this topic and “a strong desire to learn more”.

Do you feel more confident with adolescent mental health disorders?

Participants were conflicted regarding confidence level with adolescent mental health disorders. All participants agreed that their knowledge had increased but with new knowledge “comes more fear and less confidence that I can really manage what these kids are up against”. However, most participants agreed that more similar trainings would help to build confidence as this training was just a stepping stone, in the right direction of course, but we need more and more frequently to feel that we, or at least I, am confident in this area. It’s too tricky at this point, you know?

Participants who stated that they did feel more confident indicated that they felt confident in identifying mental health distress, resources, how to approach students in mental distress, and how to refer students to the appropriate mental health resources.

Talking Points

Many participants discussed freely amongst their group how they have utilized parts of the training in their classrooms already. Participants also discussed how the training has made them “see their class differently” reporting that

I think after the training, I realized that not only is their individual mental health that I am looking at in each of my students but also my classroom mental health- Are we in

distress? Are we as group in need of self-care? How can I re-arrange the curriculum or even the physical space for that matter, when I see these signs?

Other participants utilized the group interview time for clarifying discussion regarding the training and any further questions that they may have had which the DNP student addressed.

Discussion

The results from the survey and group interviews indicate that middle school educators gained awareness and knowledge from the adolescent mental health training. The results from the surveys indicate a positive growth from the pre-survey to the post-survey in regards to the training, especially in the areas of awareness and knowledge. In regards to confidence level increase, the results in the surveys also indicated a positive growth.

The group interviews suggested that the training was beneficial, appreciated, and educators believed that more training surrounding adolescent mental health was not only important, but vital for the adolescents and educators each year. Participants in the group interviews concluded that there was an increase in awareness and knowledge following the training. Participants in the group interviews indicated that they were not confident in the area of adolescent mental health which was opposite of the survey data.

The literature review has indicated that there is a high number of adolescent students who are suffering from mental health issues. Congruently, educators have determined that it is difficult to find student's appropriate support as they have no formal training or education surrounding mental health issues (Frauenholtz, et al., 2017). Untreated mental health disorders in youth can have considerable negative outcome such as poor school performance, family and peer difficulties, welfare burden, decreased life expectancy and increased early death related to suicide (Centers for Disease Control and Prevention, 2018). Due to the close proximity of

children, schools are crucial locations that can aid in identification of youth mental disorders. However, identification of mental health concerns can only be successful if educators are appropriately trained (Frauenholtz et al., 2017).

There is a lack of knowledge and mental health literacy related to children's mental health (Long et al., 2018). The lack of knowledge acts as a barrier to assisting children and their families dealing with mental health concerns (Frauenholtz et al., 2017). Educators do not receive adequate training for mental health problems and therefore, do not feel prepared to handle mental health problems within their classrooms (Sisask et al., 2014).

The mental health training provided to educators in the DNP project indicated the lack of knowledge amongst middle school educators regarding adolescent mental health. The results indicated that a mental health training was perceived positively, and may increase middle school educator awareness and knowledge surrounding adolescent mental health. In addition, the results of the training indicated that educators were utilizing the information from the training within their classrooms by targeting students who needed supports and focusing on classroom management. Educators noted that they were more aware of how mental illness affects their students, their families, academic success, and social relationships, which encouraged educators to provide mental health supports within their middle school classrooms.

Facilitators and Barriers

Facilitators. The most impactful facilitator for the training was the role of the DNP Student at the school site. The DNP Student is a registered nurse at the school and part of that role is facilitating training sessions regarding student health to the staff. This allowed the DNP student to know the staff, the school setting, and the resources that were available. The DNP

student also had quick access to the Project Team for solution-oriented meetings and discussion, such as reviewing the training prior to implementation and receiving timely feedback.

Another facilitator for the implementation of the training was the availability of the school's Mental Health Team during the training. There were questions that were asked during the training that were specific to the school site compared to the training material, which was typically addressed by the school's Mental Health Team. If the Mental Health Team had not volunteered their time to be present at the training, the questions would have been directed at the DNP Student and would not have been relevant to the training. However, the questions were relevant to the school site and therefore, the site and the participants benefited greatly from having the Mental Health Team present.

Barriers. One barrier to implementation was the factor of time. The training required two hours of the participants time to be completed in full with the amount of discussion that the DNP Student believed to be impactful. However, the training started five minutes late due to a last-minute room change and participants took longer to complete the pre-survey training than anticipated. In addition, a 10-minute break was not considered when the training was originally developed but when gauging the participants ability to continue to focus at the one-hour mark, it was important to allow a break in the training. Luckily, the training was completed in full but the length of time for discussion was decreased due to time constraints and this was reflected in the group interview feedback.

Conclusion

Evidence has shown that there is an increase trend in adolescent mental health diagnoses. In addition, there is a gap in education and training for middle school educators surrounding mental health concerns. By effectively training middle school educators, awareness and

knowledge can increase, which can help achieve early diagnosis of adolescent mental health concerns. With a tailored training approach including the “Teacher Knowledge Update” guide, educators can be given the tools to feel more confident in recognizing signs and symptoms of mental health concerns amongst their students, and determining next steps in the referral process to a school based mental health team. In addition, continued training for educators regarding adolescent mental health can help instill confidence in managing mental health disorders amongst middle school educators. School systems, school committees, and administration need to consider adolescent mental health training as a priority within their educational realm. In order for trainings to be successful, adequate time and resources need to be provided.

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Appendix

Appendix A

Training Outline

Overview:

- Confidentiality and sharing with mental health team
- Norms

Module 1: What are Mental Disorders?

- What we know about mental disorders
- Mental disorders are not
- How the brain is involved
- What happens inside the brain when it is not functioning effectively
- How does the brain show it's not working well?
- Mental disorders and six primary domains of brain function
- The inter-relationship of mental health states: language

Module 2: What is Mental Health?

- Defining mental health
- Mental distress
- Mental health problems
- Mental disorders
- What causes mental disorders
- Diagnosis of mental disorders

Module 3: Depression

- Different types
- Depressive episode
- Symptoms
- What can I do if it is depression?
- Questions to ask

Case Study Although Sylvia has been one of the most social, outspoken and diligent students in Ms. Lee's grade 7 class, she returned from the Christmas break withdrawn, quiet, and low in energy. Ms. Lee initially thought that Sylvia may need just a couple of weeks to transition back to school, but Spring Break is approaching and Sylvia continues to have difficulty concentrating, staying on task and completing her homework. When Ms. Lee asks Sylvia why she is not completing her homework, Sylvia responds by saying, "I don't know," or "No one cares, anyway." In addition, Sylvia has isolated herself from her peers, preferring to sit in the back of the classroom and not participating in class activities unless she is specifically called upon to do so.

Module 4: Suicide/Self-harm

- What is suicide/self-harm
- What does suicide/self-harm look like
- What can I do if it is suicide/self-harm
- What are risk factors?

Case Study: Ms. Brick is a grade 10 Physical Education Teacher who also coaches the senior girls' volleyball team. Over the course of the spring season, Ms. Brick is surprised to see Ashley still wearing long sleeve shirts underneath her volleyball jersey. When Ms. Brick approached Ashley to discuss her concerns of overheating during games, Ashley insisted she was cold and refused to remove her long sleeve shirt even though sweat was pouring down her face. Furthermore, Ashley refused to pull up her sleeves to release some of the heat that she was experiencing. On a rare occasion when Ashley pulls up her sleeve for a brief moment, Ms. Brick notices a succession of scars along Ashley's right inner forearm. When Ms. Brick politely asks Ashley about her scars, Ashley dismisses Ms. Brick's concerns quickly and says that it is "nothing."

Module 5: Anxiety Disorders

- What is GAD
 - o Who is at risk for GAD
 - o What does GAD look like?
 - o How to differentiate GAD from "normal worrying"
 - o What can I do if it is GAD?

Case Study: Thomas, a student in Mr. Jack's grade 4 class, is frequently absent from school. When Thomas does attend class, he expresses severe stomach pain, as well as physical pain all over his body. When Mr. Jack encourages Thomas to participate in social activities in an attempt to distract Thomas from his physical symptoms, Thomas refuses. In addition, Thomas is a high achiever who worries excessively about his homework and grades. However, his lack of attendance has not helped Thomas's ability to keep up with his academic assignments; as a result, Thomas's grades have been declining over the course of the school year.

- What is a panic disorder?
 - o Who is at risk for a panic disorder?
 - o What does panic disorder look like
 - o What can I do if it is a panic attack?

Module 6: Post Traumatic Stress Disorder (PTSD)

- Who is at risk?
- What does PTSD look like?
- What can I do if it is PTSD?

Module 7: Attention Deficit Hyperactivity Disorder

- Who is at risk?

- What does ADHD look like?
- What can I do if it is ADHD?

Appendix B

NUMBER _____

Pre/Post-Survey Questions

Please select the response most fitting to the statement.

1. I feel confident in my ability to define and explain what a mental disorder is.
 - ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral
 - ☐ Disagree
 - ☐ Strongly Disagree
2. I feel confident in my ability to define and explain what mental health is.
 - ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral
 - ☐ Disagree
 - ☐ Strongly Disagree
3. I feel confident in my ability to define and explain what depression is.
 - ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral
 - ☐ Disagree
 - ☐ Strongly Disagree
4. I feel confident in my ability to recognize the signs and symptoms of depression in adolescents.
 - ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral
 - ☐ Disagree
 - ☐ Strongly Disagree
5. I feel confident in my ability to refer a student with signs of depression to the mental health team.
 - ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral
 - ☐ Disagree
 - ☐ Strongly Disagree
6. I feel confident in my ability to define and explain what suicide and self-harm is.
 - ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral

- ☐ Disagree
 - ☐ Strongly Disagree
7. I feel confident in my ability to recognize the signs and symptoms of suicide and self-harm in adolescents.
- ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral
 - ☐ Disagree
 - ☐ Strongly Disagree
8. I feel confident in my ability to refer a student with signs of suicide or self-harm to the mental health team.
- ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral
 - ☐ Disagree
 - ☐ Strongly Disagree
9. I feel confident in my ability to define and explain what anxiety disorders are.
- ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral
 - ☐ Disagree
 - ☐ Strongly Disagree
10. I feel confident in my ability to recognize the signs and symptoms of anxiety disorders in adolescents.
- ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral
 - ☐ Disagree
 - ☐ Strongly Disagree
11. I feel confident in my ability to refer a student with signs of anxiety disorders to the mental health team.
- ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral
 - ☐ Disagree
 - ☐ Strongly Disagree
12. I feel confident in my ability to define and explain what Post-Traumatic Stress Disorder is.
- ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral
 - ☐ Disagree
 - ☐ Strongly Disagree

13. I feel confident in my ability to recognize the signs and symptoms of Post-Traumatic Stress Disorder in adolescents.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

14. I feel confident in my ability to refer a student with signs of depression to the mental health team.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

15. I feel confident in my ability to define and explain what Attention Deficit Hyperactivity Disorder is.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

16. I feel confident in my ability to recognize the signs and symptoms of Attention Deficit Hyperactivity Disorder in adolescents.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

17. I feel confident in my ability to refer a student with signs of Attention Deficit Hyperactivity Disorder to the mental health team.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

Appendix C

Grade Level Group Interview Questions

Prior to starting, all participants will be instructed that their responses will be written down and if they did not want their responses documented to please let me know. Secondly, that all information would be kept confidential. Participants would be reminded that if they feel that they would like to leave the group, they are allowed to leave at any point.

Can you share what grade level and your role within the school?

Can you share your overall thoughts on the training?

What were your thoughts on the topics presented?

What do you think was the best part of the training?

How do you think the training could be improved?

Do you feel that you are more aware of adolescent mental health disorders?

Do you feel that you have increased knowledge of adolescent mental health disorders?

Do you feel more confident with adolescent mental health disorders?

It should be noted that these questions are the outline for the group interview and that additional follow up questions will be asked based on the responses of the participants.

Appendix D**Cost Table**

Item	Cost
<i>Data Collection and Analysis</i>	
University of Massachusetts Amherst Library Databases	Free for student use
CDC, Board of Public Health, NASN, Public Health Commission	Free for public use
Survey materials (paper and printing)	Free
Laptop with Excel, Microsoft, and PowerPoint	\$900 (Not included in project cost; already owned by DNP student)
<i>Presentation Materials</i>	
PowerPoint	No cost associated (already owned by DNP student)
Printed Handouts	No cost associated (site supplying materials free of charge)
Meeting Spaces	No cost associated (meeting spaces available at site free of charge)
<i>Personnel</i>	
DNP candidate as project leader	\$750 per credit x 2 semesters (6 credits) = \$4,500 (Not included in project cost)
Project Team (School Psychologist and School Social Worker)	No cost associated due to volunteering time.
<i>Total Costs/Expenses</i>	
Total Estimated Cost	\$5,400
Total Estimated Cost for Project (minus costs of services volunteered)	\$0
Total:	\$0

Appendix E**Timeline****Table 1**

Task	Sept	Oct	Nov	Dec	Jan	Feb	March	April
Meeting with Project Team to review finalize modules	X	X						
Determine changes to staffing model and introduce mental health training plan to new staff	X	X						
Conduct training session (including pre/post survey)			X					
Conduct analysis of combined pre/posttest of sessions			X	X				
Grade level group interviews				X	X	X		
Final data analysis and write up						X	X	